

## aurachin B dehydrogenase

Cat. No. EXWM-0314

Lot. No. (See product label)

### Introduction

#### Description

The enzyme from the bacterium *Stigmatella aurantiaca* catalyses the final step in the conversion of aurachin C to aurachin B. In vivo the enzyme catalyses the reduction of 4-hydroxy-2-methyl-3-oxo-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline-1-oxide to form 2-methyl-1-oxo-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline-3,4-diol (note that the reactions written above proceed from right to left), which then undergoes a spontaneous dehydration to form aurachin B.

#### Synonyms

AuaH

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.1.1.394

#### Reaction

aurachin B + NAD<sup>+</sup> + H<sub>2</sub>O = 4-hydroxy-2-methyl-3-oxo-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline 1-oxide + NADH + H<sup>+</sup> (overall reaction); (1a) 3,4-dihydroxy-2-methyl-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline 1-oxide + NAD<sup>+</sup> = 4-hydroxy-2-methyl-3-oxo-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline 1-oxide + NADH + H<sup>+</sup>; (1b) aurachin B + H<sub>2</sub>O = 3,4-dihydroxy-2-methyl-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline 1-oxide (spontaneous)

#### Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

### Storage and Shipping Information

#### Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.